Pre-rigor beef quality assessment of Bali cattle subjected to different finishing systems in Malaysia.

ABSTRACT

The study was carried out in an attempt to assess meat quality of Bali cattle finished in 3 different systems. Twenty one bulls were selected from an existing herd under an oil palm plantation and randomly assigned to 120 days of feeding in; Integration-INT (n = 8), basal energy Feedlot-F (n = 6) and high energy Feedlot-FB (n = 7) System. All animals were humanely slaughtered at a commercial abattoir. Samples of Longissimus Dorsi (LD), Supra Spinatus (SS) and Semi Membranosus (SM) muscles were collected and prepared accordingly for the determinations of pH, cooking loss, shear force and color (L* and a*) values. The animals finished on Integration (TNT) demonstrated higher L* values ($p<0.05$) in SS muscle and lower L* values ($p<0.05$)inbothLD and SM muscles. Lower cooking losses ($p<0.05$) were observed in LD and SM muscles from the INT group. However, there was no difference in pH, a* (redness) and shear force values among the treatments and these were consistently shown in all three muscles. The results from this study demonstrate the influence of finishing system on Bali cattle meat quality.

Keyword: Bali cattle; Cooking; Feedlot; Integration; Malaysia; Meat quality.